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March 16, 2009

Starbucks Coffee Company
2401 Utah Avenue South, Suite 800
Seattle, Washington 98134-1435

ATTENTION: Ms. Susan Long, Mailstop S-SC5

Dear Ms. Long:

Enclosed please find Construction Permit No. 0460-0027-CA.1 which will replace the construction permit previously issued July 27, 2007. This permit reflects changes made to the roasting process. Pursuant to the South Carolina Administrative Procedures Act, this permit decision may be appealed in accordance with applicable state law. Please see the enclosed Notice of Appeal Procedure, effective July 01, 2006, for guidelines on appeal submittals.

Please do not hesitate to contact the appropriate staff member, Jidida K. Douglas, at (803-898-4193) or e-mail at douglajk@dhec.sc.gov promptly if you need any further assistance.

Sincerely,

Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

EJB:SZ:kal

Enclosure

cc: Tabatha G. Corley, Region 5, Aiken EQC Office
Permit File: 0460-0027
Main File: 0460-0027

**OFFICE OF ENVIRONMENTAL QUALITY CONTROL
BUREAU OF AIR QUALITY
SYNTHETIC MINOR CONSTRUCTION PERMIT**

Starbucks Manufacturing Corporation
114 Sirens Lane
Gaston, SC 29053

Permission is hereby granted to construct a 108,000 ton per year coffee roasting facility. Operations at this facility will consist of green bean cleaning, green bean handling, roaster system, and roasted bean handling. Some of the green beans will be received already decaffeinated so no decaffeination of the beans will occur at this facility.

The following operations and equipment will be installed:

CP ID	Equipment Description	Installation Date	Control Device ID
CA (01)	Green Bean Cleaning (GBC) – includes receiving hopper (GBC-RH), small silo hopper (GBC-SH)	TBD	GC1
CA (02)	Green Bean Handling (GBH) - 96 green bean silos (GBH-S1 – S96), silo receivers (GBH-SR), and blendback receiver (GBH-BBR)	TBD	GD1
CA (03)	Roasting and Cooling Tray Systems (RCT) – three (3) 3.5 million BTU/hr, model EN2000, roasters each equipped with a 5.1 million BTU/hr catalytic oxidizer (R1, R2A, R2B), three (3) 4.6 million BTU/hr, model EN1500, roasters each equipped with a 4.0 million BTU/hr catalytic oxidizer (R3 – R5), six roaster cooling trays (C1, C2A, C2B, C3, C4, C5), six roaster receivers (RCT-RR1, RR2A, RR2B, RR3, RR4, RR5), six hot chaff cyclones (RCT-HCC1, HCC2A, HCC2B, HCC3 – HCC5)	TBD	GD1, CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5, CHAFF1, CHAFF2, CT1, CT2A, CT2B, CT3, CT4, CT5

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DATE OF ISSUE: March 16, 2009
FACILITY SIC/NAICS CODES: 2095 / 311920

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CONTROL EQUIPMENT			
Control Device ID	Control Device Description	Installation Date	Pollutant(s) Controlled
GC1	Green Bean Cleaning Baghouse – controls emissions from green bean cleaning and weighing, receiving hopper (GBC-RH), and small silo hopper (GBC-SH) all part of the green bean cleaning process	TBD	PM/PM10
GD1	Green Bean Dust Collection System 1 – controls emissions from silo receivers (GBH-SR), the blendback receiver (GBH-BBR) all part of the green bean handling process, and controls emissions from the roaster receivers (RCT- RR1, RR2A, RR2B, RR3, RR4, RR5)	TBD	PM/PM10
CATOX1	4.0 million BTU/hr Catalytic Oxidizer 1 – controls emissions from roaster R1	TBD	PM/PM10, CO, VOC, and HAP
CATOX2A	4.0 million BTU/hr Catalytic Oxidizer 2A – controls emissions from roaster R2A	TBD	PM/PM10, CO, VOC, and HAP
CATOX2B	4.0 million BTU/hr Catalytic Oxidizer 2B – controls emissions from roaster R2B	TBD	PM/PM10, CO, VOC, and HAP
CATOX3	5.1 million BTU/hr Catalytic Oxidizer 3 – controls emissions from roaster R3	TBD	PM/PM10, CO, VOC, and HAP
CATOX4	5.1 million BTU/hr Catalytic Oxidizer 4 – controls emissions from roaster R4	TBD	PM/PM10, CO, VOC, and HAP
CATOX5	5.1 million BTU/hr Catalytic Oxidizer 5 – controls emissions from roaster R5	TBD	PM/PM10, CO, VOC, and HAP
CT1	Cooling Tray Cyclone 1 – controls emissions from the cooling tray on R1	TBD	PM/PM10
CT2A	Cooling Tray Cyclone 2A – controls emissions from the cooling tray on R2A	TBD	PM/PM10
CT2B	Cooling Tray Cyclone 2B – controls emissions from the cooling tray on R2B	TBD	PM/PM10
CT3	Cooling Tray Cyclone 3 – controls emissions from the cooling tray on R3	TBD	PM/PM10
CT4	Cooling Tray Cyclone 4 – controls emissions from the cooling tray on R4	TBD	PM/PM10
CT5	Cooling Tray Cyclone 5 – controls emissions from the cooling tray on R5	TBD	PM/PM10
(VOID) HEAF	(VOID) High Efficiency Air Filter – controls emissions from the roaster hot chaff cyclone bottoms (RCT-HCC1 – HCC6)	TBD	PM/PM10
CHAFF1	Pair of cyclones in series – controls emissions from the hot and cold chaff cyclone bottoms from roasters R1, R2A, and R2B (CT1, CT2A, CT2B, HCC1, HCC2A, HCC2B)	TBD	PM/PM10
CHAFF2	Pair of cyclones in series – controls emissions from the hot and cold chaff cyclone bottoms from roasters R3, R4, and R5 (CT3, CT4, CT5, HCC3, HCC4, HCC5)	TBD	PM/PM10

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The following equipment that has been exempted from permitting is also being installed:

Equip ID	Source Description (Date Listed)	Basis
RBH	Roasted Bean Handling (RBH) - nine small roasted bean silos per line (RBH-S1 – S45)	SC Reg. 61-62.1, Section II.A.1.c.
SH1 – SH20	Twenty (20) – natural gas fired Space Heaters equipped with Low NOx burners to include: Six (6) rated at 0.602 million BTU/hr with evaporative condensers (IDs SH1-SH6); One (1) rated at 1.22 million BTU/hr with an evaporative condenser (ID SH7); Thirteen (13) ranging from 0.045 – 0.480 million BTU/hr (IDs SH8-SH20)	SC Reg. 61-62.1, Section II.B.2.a; SC Reg. 61-62.5, Std 5.2, Sect. I.b.1.
EmGen1	400 kW Emergency Generator #1, diesel fuel fired, equipped with hour meter	SC Reg. 61-62.1, Section II.B.2.f.
(VOID) EmGen2, EmGen3	(VOID)Two (2) Emergency Generators #2 and #3 – 177 kW each, diesel fuel fired and equipped with hour meters	SC Reg. 61-62.1, Section II.B.2.f.
HOOD	Shop Hood where gas metal arc welding (GMAW) is performed Expected 260 hour/yr operation using 2000 lb/yr of welding material	SC Reg. 61-62.1, Section II.B.2.h.
DGTANK	Degreaser Tank – uses non-HAP containing solvent Estimated 100 gallons usage per year	SC Reg. 61-62.1, Section II.B.2.h.
SAMPLE	Six (6) – Sample Roasters, each with a capacity of 0.22 lb/batch, and each roaster burner rated at 1000 BTU/hr	SC Reg. 61-62.1, Section II.B.2.h.
CODERS	Five (5) – Laser Coding Devices, mark bags with information relative to contents, mfg date, etc.	SC Reg. 61-62.1, Section II.B.2.h.
LAB HOOD	One (1) Laboratory hood	SC Reg. 61-62.1, Section II.B.2.e

NOTWITHSTANDING ANY OF THE CONDITIONS LISTED BELOW, NO APPLICABLE LAW, REGULATION, OR STANDARD WILL BE CONTRAVENED.

CONDITIONS

1. All official correspondence, plans, permit application forms, and written statements are an integral part of this permit.
2. The owner/operator shall submit written notification to the Director of the Engineering Services Division of the date construction is commenced, postmarked no later than 30 days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within 15 days after such date.
3. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time frame. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
4. The owner or operator shall comply with all terms, conditions, and limitations of this permit.

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This is pursuant to the provisions of Section 48-1-110, 1976 *Code of Laws of South Carolina*, as amended, and the *South Carolina Air Quality Control Regulation 61-62.1*, Section II.

I. STANDARD CONDITIONS

- A. This permit expressly incorporates all the provisions of *South Carolina Department of Health and Environmental Control Regulation 61-62.1*, Section II, Paragraph J.

II. SPECIAL CONDITIONS

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
Facility Wide	PM, PM ₁₀ , CO, VOC	less than 250 TPY, each	*	SC Reg. 61-62.1, Sect. II. H.	No
Facility Wide	PM ₁₀ , NOx, CO, VOC	less than 100 TPY, each	*	SC Reg. 61-62.1, Sect. II.G	No
Facility Wide	HAPs	Less than 10 TPY each, 25 TPY total	*	SC Reg. 61-62.1, Sect. II.G.	No
CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5	PM	0.5 lb/million BTU	5	SC Reg. 61-62.5, Std 3	No
CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5	Opacity	20%	9	SC Reg. 61-62.5, Std 3	No
01	PM	42.53 lb/hr	5	SC Reg. 61-62.5, Std 4	No
02	PM	22.03 lb/hr	5	SC Reg. 61-62.5, Std 4	No
01, 02, 03	Opacity	20%	9	SC Reg. 61-62.5, Std 4	No
03 – R1/C1/RR1/HCC1, R2A/C2A/RR2A/HCC2A, R2B/C2B/RR2B/HCC2B	PM	6.08 lb/hr, each	5	SC Reg. 61-62.5, Std 4	No
03 – R3/C3/RR3/HCC3, R4/C4/RR4/HCC4, R5/C5/RR5/HCC5	PM	7.16 lb/hr, each	5	SC Reg. 61-62.5, Std 4	No

N/A = Not Applicable

* = To be determined by the Bureau

The emission limitations listed for each emission unit are based on operation at permitted capacity. Operation at less than permitted capacity must meet emission limits specified in the applicable regulations based on that operating rate. All test methods must be the most recent revisions that are

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published in the *Code of Federal Regulations*, in accordance with the requirements of SC Regulation 61-62.1, Section IV, Source Test.

B. CONTINUOUS MONITORING REQUIREMENTS

ID	Pollutant
N/A	N/A

N/A = Not Applicable

C. SOURCE TEST SCHEDULE

ID	Pollutant	Frequency	Method ¹
CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5	PM	Initial and every two years	5

¹Alternative methods other than those listed in the table may be used provided they are approved by the Department via the test plan submittal and approval process.

D. ADDITIONAL CONDITIONS

Condition Number	Conditions
1.	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
2.	In accordance with SC Regulation 61-62.1 Section II(J), for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.

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Condition Number	Conditions
3.	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in this permit condition. This is a State Only enforceable requirement.</p>
4.	These conditions shall not supersede any State or Federal requirements such as National Emission Standards for Hazardous Air Pollutants, unless these conditions would impose a more restrictive limit.
5.	This construction permit was reviewed and issued based on the permit application submitted by the owner/operator. The owner/operator shall obtain any Bureau authorization required under South Carolina Regulation 61-62.1, Section II(A) prior to making modifications not covered under this construction permit.
6.	<p>The owner or operator shall submit a written request to the Director of the Engineering Services Division for a new or revised operating permit to cover any new or altered source postmarked no later than 15 days after the actual date of initial startup of each new or altered source. The written request for a new or revised operating permit must include, as a minimum, the following information:</p> <ul style="list-style-type: none"> i. A list of sources that were placed into operation. ii. The actual date of initial startup of each new or altered source.
7.	The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the permittee may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Director of the Engineering Services Division a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.
8.	Unless elsewhere specified within this permit, all records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request.
9.	<p>Unless elsewhere specified within this permit, all reports required under this permit including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below, postmarked no later than thirty (30) calendar days after the end of the reporting period.</p> <p style="text-align: center;">SC DHEC – BAQ 2600 Bull Street Columbia, SC 29201</p>

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Condition Number	Conditions															
10.	(Facility Wide) In accordance with SC Regulation 62.1, Section II (H) the facility shall be limited to emitting less than 250 TPY of PM, PM ₁₀ , CO in order to be a synthetic minor for PSD.															
11.	(Facility Wide) In accordance with SC Regulation 62.1, Section II (G) the facility shall be limited to emitting less than 100 TPY of PM ₁₀ , CO, NOx, and VOC and less than 10 tons per year for each individual HAP and less than 25 tons per year total HAPs for the entire facility in order to avoid being a major source.															
12.	(Equip IDs: R1, R2A, R2B, R3 – R5 and CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5) The roasters are permitted to burn only natural gas as fuel. The catalytic oxidizers are permitted to burn only natural gas and vent gases from the roasters as fuels. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.															
13.	(Equip IDs: CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5) As specified in SC Regulation 61-62.5, Standard No. 3, Section IX (D), this facility has been granted an exemption from all of the Operator Training Requirements 61-62.5, Standard No. 3, Section IX (C).															
14.	(IDs 01 – 03) In accordance with SC Regulation 61-62.5, Standard No. 4 – Emissions from Process Industries, Section IX – Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.															
15.	<div>In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour ($E = 4.10P^{0.67}$) and for process weight rates greater than 30 tons per hour ($E = 55.0P^{0.11} - 40$) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</div> <table><tr><th>OP ID – Equip ID</th><th>Emission Limit (lbs/hr)</th><th>Process Weight Rate (tons/hr)</th></tr><tr><td>01</td><td>42.53</td><td>40.0</td></tr><tr><td>02 - all</td><td>22.03</td><td>12.3</td></tr><tr><td>03 – R1/C1/RR1/HCC1, R2A/C2A/RR2A/HCC2A, R2B/C2B/RR2B/HCC2B</td><td>6.08, each</td><td>1.8, each</td></tr><tr><td>03 – R3/C3/RR3/HCC3, R4/C4/RR4/HCC4, R5/C5/RR5/HCC5</td><td>7.16, each</td><td>2.3, each</td></tr></table>	OP ID – Equip ID	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	01	42.53	40.0	02 - all	22.03	12.3	03 – R1/C1/RR1/HCC1, R2A/C2A/RR2A/HCC2A, R2B/C2B/RR2B/HCC2B	6.08, each	1.8, each	03 – R3/C3/RR3/HCC3, R4/C4/RR4/HCC4, R5/C5/RR5/HCC5	7.16, each	2.3, each
OP ID – Equip ID	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)														
01	42.53	40.0														
02 - all	22.03	12.3														
03 – R1/C1/RR1/HCC1, R2A/C2A/RR2A/HCC2A, R2B/C2B/RR2B/HCC2B	6.08, each	1.8, each														
03 – R3/C3/RR3/HCC3, R4/C4/RR4/HCC4, R5/C5/RR5/HCC5	7.16, each	2.3, each														
16.	(Control Device IDs: CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5) In accordance with SC Regulation 61-62.5, Standard No. 3 – Waste Combustion and Reduction, Section III – Emission Limitations and Operating Requirements, the opacity from Industrial Incinerators shall not exceed 20%.															
17.	(Control Device IDs: CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5) In accordance with SC Regulation 61-62.5, Standard No. 3 – Waste Combustion and Reduction, Section III – Emission Limitations and Operating Requirements, the allowable discharge of particulate matter resulting from Industrial Incinerators is 0.5 lb/10 ⁶ BTU total heat input (waste + fuel).															
18.	(Facility Wide) The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements, all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.															

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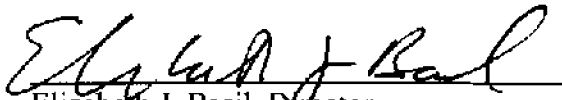
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Condition Number	Conditions
19.	<p>(Control Device IDs: (CT1, CT2A, CT2B, CT3 – CT5, CHAFF1, CHAFF2) The cyclone(s) shall be in place and operational whenever processes controlled by the cyclone(s) are running, except during periods of cyclone malfunction or mechanical failure. Operation and maintenance checks will be made on the cyclone, ductwork and dust collection hoppers and conveying systems for proper operation. The following operation and maintenance checks will be made on at least a weekly basis for all cyclones:</p> <p>a) The cyclone(s) and ductwork system(s) will be checked for damaged or worn sheet metal or other interferences with proper operation.</p> <p>b) Check dust collection hoppers and conveying systems for proper operation.</p> <p>The results from the operation and maintenance checks shall be maintained in logs (written or electronic), along with any corrective action taken.</p>
20.	<p>(Control Device IDs: GC1, GD1) The owner/operator shall install operate and maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>
21.	<p>(Control Device IDs: CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5) The owner/operator shall install, calibrate, maintain and operate continuous temperature indicators at the inlet and outlet of each catalytic oxidizer. The combustion temperature must be continuously measured and recorded. The temperature monitor shall take a minimum of 1 measurement every 15 seconds with this data recorded at least every successive 60 seconds. Recorders must have a minimum chart speed of one inch per hour for strip chart recorders and a maximum of 24 hours per chart for circular recorders. The temperature monitor is subject to the calibration and quality assurance procedures of SC Regulation 62.5, Standard 3, Section VII. The Bureau has approved the facility's alternative method to perform quarterly calibration checks as opposed to weekly calibration checks. The owner/operator shall also check the activity level of a representative sample of the catalyst at least every 12 months. The catalytic oxidizers shall be in place and operational whenever processes controlled by the catalytic oxidizers are running, except during periods of catalytic incinerator malfunction or mechanical failure. The minimum operating temperature will be established during the initial source test for each model catalytic oxidizer.</p>
22.	<p>(Control Device IDs: GC1, GD1, CHAFF1, CHAFF2, CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5, CT1, CT2A, CT2B, CT3 – CT5) All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.1 Section II.</p>
23.	<p>(Control Device IDs: GC1, GD1, CHAFF1, CHAFF2, CATOX1, CATOX2A, CATOX2B, CATOX3, CATOX4, CATOX5, CT1, CT2A, CT2B, CT3 – CT5) Operational ranges for the monitored parameters shall be established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. These ranges, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up The operating ranges may be updated using this procedure, following Bureau approval.</p>

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Condition Number	Conditions
24.	<p>(Facility Wide) The owner/operator shall maintain production rate records, fuel usage records, and any other records necessary to determine facility wide PM, PM₁₀, NO_x, CO, VOC and HAP emissions. PM, PM₁₀, NO_x, CO, VOC and HAP emissions shall be calculated on a monthly basis, and a twelve month rolling sum shall be calculated for total PM, PM₁₀, NO_x, CO, VOC and HAP emissions. The twelve month rolling sum for PM₁₀, NO_x, CO, and VOC shall not exceed 100 tons. The twelve month rolling sum for HAPs shall not exceed 10 tons per year for each individual HAP and 25 tons per year total HAPs for the entire facility. The twelve month rolling sum for PM shall not exceed 250 tons. Reports of the calculated values and the twelve-month rolling sum shall be submitted semiannually.</p> <p>An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors.</p>
Source Testing Requirements	
25.	<p>In accordance with SC Regulation 61-62.5, Std. 3, an initial source test for PM emissions shall be conducted within 180 days after startup and every two (2) years thereafter. Testing shall be conducted so that one of each model catalytic oxidizer is tested and after three tests all catalytic oxidizers have been tested. After testing has been conducted on all six catalytic oxidizers, the facility may send a written request to reduce the frequency of testing. This request shall be sent to the Engineering Services Division.</p>
26.	<p>In accordance with SC Regulation 61-62.1, Section II (G), an initial source test for NO_x, CO, VOC, and formaldehyde emissions shall be conducted within 180 days after startup and as required by the Bureau. Testing shall be conducted so that one of each model catalytic oxidizer is tested.</p>
27.	<p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present. The owner or operator shall submit a written report of the final source test results to the Department by the close of business on the 45th day following the completion of the test, unless an alternative date has been requested in and approved with the site-specific test plan prior to testing or is otherwise specified in a relevant Federal or State standard.</p>


Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

ATTACHMENT A

Modeled Emission Rates Starbucks Manufacturing Corporation 0460-0027-CA.R1 PAGE 1 OF 2

STANDARD NO. 2 - MODELED NAAQS EMISSION RATES (LBS/HR)					
STACK ID	TSP	PM₁₀	SO₂	*NO_x	CO
R1-Roaster	0.37	0.37	0.06	4.27	1.27
R2A-Roaster	0.37	0.37	0.06	4.27	1.27
R2B-Roaster	0.37	0.37	0.06	4.27	1.27
R3-Roaster	0.29	0.29	0.05	3.34	0.99
R4-Roaster	0.29	0.29	0.05	3.34	0.99
R5-Roaster	0.29	0.29	0.05	3.34	0.99
CT1-Cooling Tray	0.53	0.53	--	--	--
CT2A-Cooling Tray	0.53	0.53	--	--	--
CT2B-Cooling Tray	0.53	0.53	--	--	--
CT3-Cooling Tray	0.41	0.41	--	--	--
CT4-Cooling Tray	0.41	0.41	--	--	--
CT5-Cooling Tray	0.41	0.41	--	--	--
GC1-Green Dust Conveying Collector	0.41	0.41	--	--	--
GD1	0.23	0.23	--	--	--
CHAFF1 (hot and cold chaff collection from roasters R1, R2A and R2B)	0.21	0.21	--	--	--
CHAFF2 (hot and cold chaff collection from roasters R3, R4 and R5)	0.21	0.21	--	--	--
FACILITY TOTAL	5.86	5.86	0.33	22.83	6.78
*NOx Modeled emission rates are based on the annualized emission rate (based on a 100 TPY limit for the plant). 8/19/08 summary					

ATTACHMENT A

Modeled Emission Rates Starbucks Manufacturing Corporation 0460-0027-CA.R1 PAGE 2 OF 2

STANDARD NO. 7 - MODELED PSD CLASS II INCREMENT EMISSION RATES (LBS/HR)			
STACK ID	Minor Source Baseline Date(s)		
	10/30/2000	05/20/1981	10/30/2000
	PM ₁₀	SO ₂	*NO _x
R1-Roaster	0.37	0.06	4.27
R2A-Roaster	0.37	0.06	4.27
R2B-Roaster	0.37	0.06	4.27
R3-Roaster	0.29	0.05	3.34
R4-Roaster	0.29	0.05	3.34
R5-Roaster	0.29	0.05	3.34
CT1-Cooling Tray	0.53	--	--
CT2A-Cooling Tray	0.53	--	--
CT2B-Cooling Tray	0.53	--	--
CT3-Cooling Tray	0.41	--	--
CT4-Cooling Tray	0.41	--	--
CT5-Cooling Tray	0.41	--	--
GC1-Green Dust Conveying Collector	0.41	--	--
GD1	0.23	--	--
CHAFF1 (hot and cold chaff collection from roasters R1, R2A and R2B)	0.21	--	--
CHAFF2 (hot and cold chaff collection from roasters R3, R4 and R5)	0.21	--	--
FACILITY TOTAL	5.86	0.33	22.83
*NO _x Modeled emission rates are based on the annualized emission rate (based on a 100 TPY limit for the plant). 8/19/08 summary			

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)				
STACK ID	Formaldehyde	Pollutant	Pollutant	Pollutant
	50-00-0	CAS	CAS	CAS
R1-Roaster	0.07			
R2A-Roaster	0.07			
R2B-Roaster	0.07			
R3-Roaster	0.05			
R4-Roaster	0.05			
R5-Roaster	0.05			
FACILITY TOTAL	0.36			

Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3393.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201
3. The request for final review should include the following:
 - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
 - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
 - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.